

WHAT IS CLAIMED IS:

1. A cutting machine comprising at least a chuck table for fixedly holding a workpiece to be cut, an X-axial feeder means for feeding the chuck table bearing the workpiece thereon in X-axial direction, and first and second cutting means each having a spindle arranged in Y-axial direction, perpendicular to the X-axial direction, said first and second cutting means being so arranged that rotary axes of the spindles may be aligned with each other with their rotary blades facing each other, wherein each rotary blade comprises a circular cutting blade having an annular hub integrally connected to one side; each spindle has the rotary blade mounted with its hub directed inside, leaving no projection outside, thus permitting each cutting blade to face the counter cutting blade without anything intervening therebetween; and the cutting machine further comprises water jet nozzle means in the vicinity of the rotary blade.

2. A cutting machine according to claim 1, wherein it further includes blade defect detecting means comprising light emitting and light receiving elements so arranged on the side of the annular hub of each rotary blade that the beam of light from the light emitter may reach the light receiver after being reflected from the rotary blade.